

# **Always On, Always Aware**

## **Applications of Ubiquitous Computing**

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# Let's take a look at the future...

Name:  
Vittorio Rossi

Occupation:  
Advertising Sales

[Part-time playboy.  
Big-time consumer.]



Video Clip

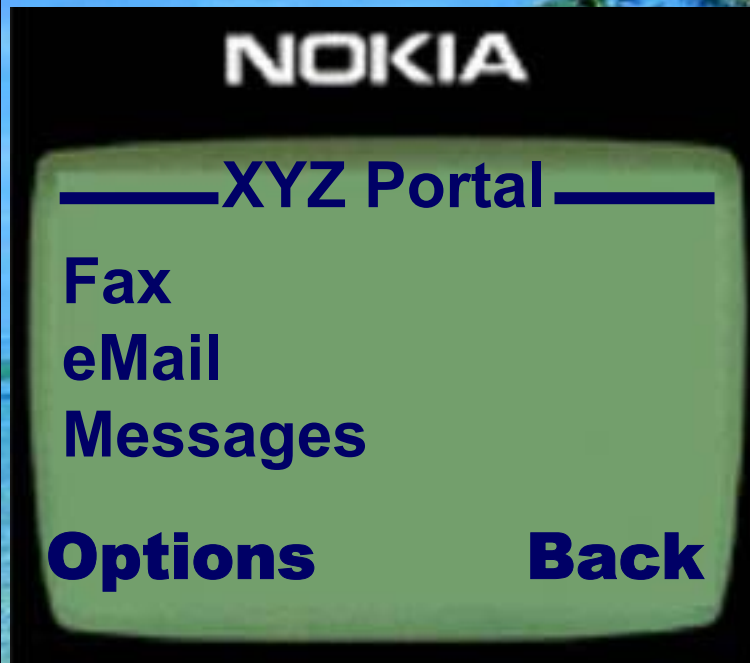


# What should the mobile device do at the beach





Get you faxes from your office?





Or, would you rather have this?





# Our position on M-Commerce

**M-Commerce is not about browsing the Web on your cell phone**

**It is about providing personalized services that are highly sensitive to the immediate environment and needs of the user**



**Sense the environment**

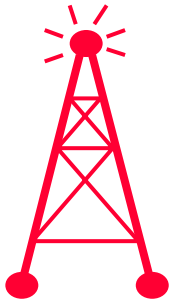


**Provide service**



**Enable action**

# What can we realistically assume about the emerging wearable/portable platform?



## Service Channels

- Continuous, packet-based connection at 64Kbs to 2Mbps

## Sensors

- Geographic position - Voice commands
- Biometric and environment sensing



## Effectors

- Interaction with local networks and devices (e.g., Bluetooth)
- “Walk in and play”



# Re-thinking CRM



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CDPD

## Brave New World

Amazon.com	\$7.95
Books.com	\$8.55
Barnes and Noble	\$8.95
Book Stacks, Ultd.	\$9.95

back

home

buy

**Location of your customer is the location of your business**





# Real-world showroom

**Your products will  
be able to sell  
themselves over  
and over again**





# Re-thinking customer service



Video Clip



**Mobile Devices will be the eyes and ears of service providers**



# Re-thinking products and services: your products are your service dispensers...

**Strive for a Physical Point of Presence wherever your products and services are used**



**I visited my doctor three times  
before breakfast today**



Video Clip



**Be ready to provide  
continuous services**



# Micro-granularity of services: Insurance by the mile?





# Pay per use chairs?





# Killer App: Where is Junior?







# Your customers will not necessarily be human: Credit Card Barbie



**Products as customers (the car, my house, the vending machine ...)**

**Limited decision making**

**What about customer relationship?**





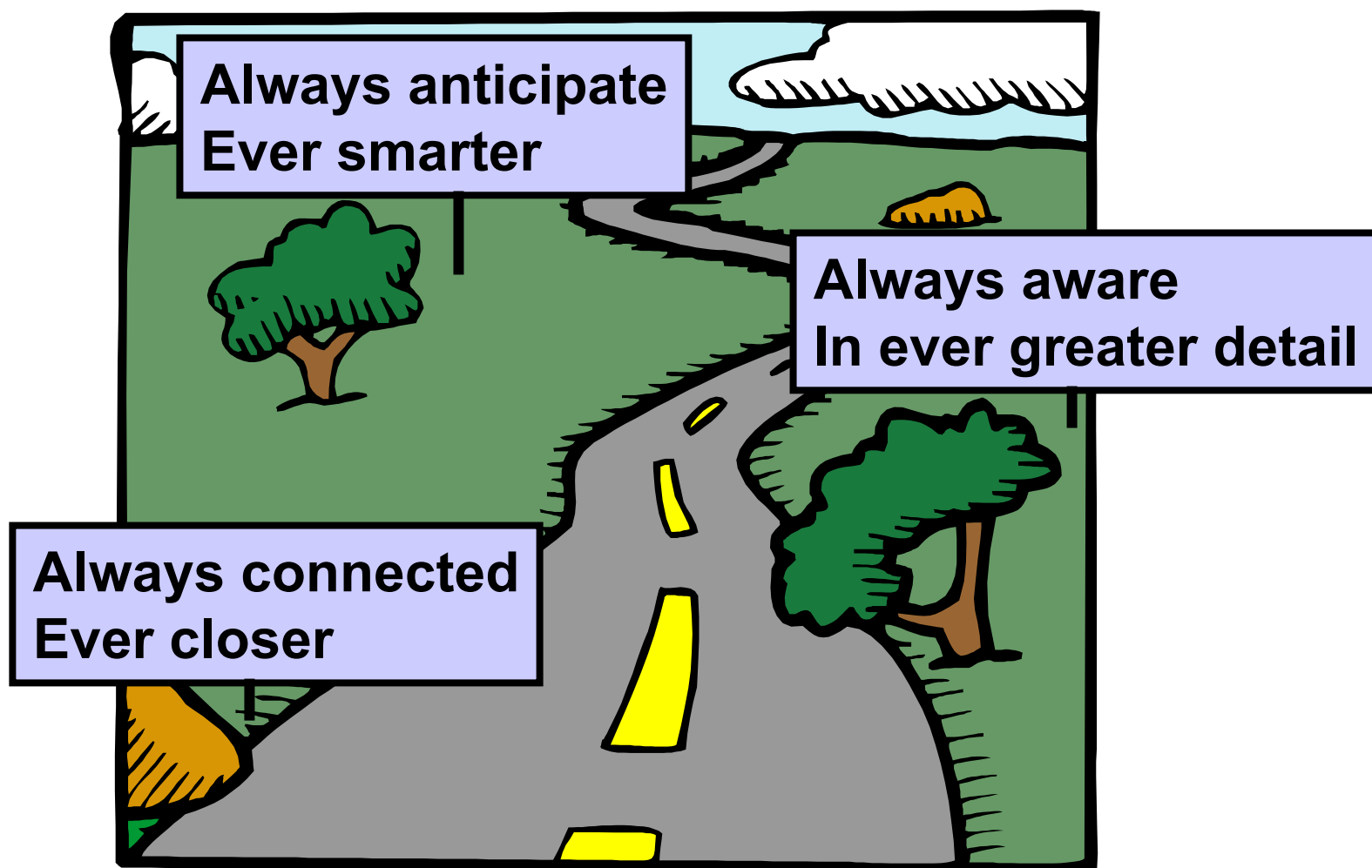
**Privacy: If we value it, someone  
will sell it to us**

**Personal Trust services  
will be the custodians of  
our private information  
and mediate between us  
and the world**





# The road ahead



**Always anticipate**  
**Ever smarter**

**Always aware**  
**In ever greater detail**

**Always connected**  
**Ever closer**